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ABSTRACT

More mothers than ever are now entering the work force and leaving greater numbers of preschool children and infants with less maternal supervision. How this phenomenon affects the development of infants and preschoolers has been the focus of much research, and research results have been mixed. A review of the research related to maternal employment and child development, while often contradictory, shows that the predicted catastrophic consequences of maternal employment and nonmaternal care are not strongly supported by existing data. The general results of studies relevant to the effects of maternal employment on parenting suggest that work status per se is not as important a factor as the attitudes of the mother and her family towards her employment status. Research exploring the attachment process suggests that high-quality day care centers seldom produce negative effects on attachment. Finally, the results of the effects of maternal employment on the child's emotional and cognitive development have generally found day care children to have either more peer orientation or no differences in peer orientation when compared to home-reared children. While these findings suggest that maternal employment may not adversely affect young children, research limitations, conflicting results, and the long-range predictions of theorists who support the importance of early maternal care must be considered. There is a need for quality longitudinal studies to examine the long-term effects of maternal employment on child development. A six-page reference list concludes the paper. (NB)

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EFFECTS OF MATERNAL EMPLOYMENT AND NONMATERNAL CARE ON INFANTS AND PRESCHOOLERS: 1970-1984

CG 019358

Doctoral Research Paper

for the Degree of Doctor of Psychology

ROSEMEAD SCHOOL OF PSYCHOLOGY

BIOLA UNIVERSITY

ROBERT LOWELL WHITCOMB

1985

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EFFECTS OF MATERNAL EMPLOYMENT AND NONMATERNAL CARE ON INFANTS AND PRESCHOOLERS: 1970-1984

BY

ROBERT L. WHITCOMB

A doctoral research paper submitted to
Rosemead School of Psychology
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for the degree of
DOCTOR OF PSYCHOLOGY

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1985

EFFECTS OF MATERNAL EMPLOYMENT AND NONMATERNAL CARE ON INFANTS AND PRESCHOOLERS: 1970-1984

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Abstract

Research literature pertaining to the effects of maternal employment and subsequent nonmaternal care on infants and preschool children is reviewed. The results are organized around three aspects: (a) the effects on parenting, (b) the effects on attachment, and (c) the effects on social-emotional and cognitive development. Research evidence was often contradictory, but generally indicated that substitute care (primarily day care) did not have to be disruptive in any of the three areas considered. Limitations of present research are considered. Recommendations for future research (especially quality longitudinal studies) are proposed.

Effects of Maternal Employment and Nonmaternal Care on Infants and Preschoolers: 1970-1984

Parents have long concerned themselves with child care as evidenced by the popularity of Baby and Child Care by Dr. Benjamin Spock. This was first published in 1946 and after several revisions and editions, by 1977 it had sold more than 28,000,000 copies. It has been the source book for two generations of parents. In spite of this obvious interest in parenting, several writers have recently warned that we may be witnessing an entire culture that no longer cherishes its children (Kirsch, 1981; Steinhart, 1979). In a time of increasing stress and rapid social change, children are "suddenly stripped of the single best buffer against those stresses: the old fashioned family" (Kirsch, 1981, p. 1, section C). Kirsch adds that high divorce rates, increasing self-orientation of parents, less willingness of parents to make sacrifices for their family, and the increasing likelihood of parental outside activities all support his warnings.

While any one of these aspects could be studied, this paper focuses upon the effects of employed mothers on infants and preschoolers. There is no intent to suggest that working mothers do not cherish their children. But the fact of their absence from their children often implies an attitude toward parenting and the needs of children that could be construed as diminishing parental

interest in children and an increasing interest in economic welfare.

We are clearly witnessing a move away from the so called "traditional family," in which only one parent, the father, earns the family income. More mothers than ever before are now entering the work force, leaving greater numbers of preschool children and infants with less maternal supervision. Hence, the traditional family seems to be in the process of being supplanted by the dual-earner family. Others however, offer an alternative perspective to interpretation of this social phenomenon. Lamb (1982) submits that the traditional family is of recent historical origin and argues that while women have always assumed primary responsibility for child care, this responsibility has seldom precluded either major involvement in providing sustenance or substantial reliance upon the extended family. In essence, Lamb suggests the working mother and reliance on substitute care are nothing new and argues that the traditional family has only existed since the industrial revolution.

Lamb's argument not withstanding, it is clear that in our present society working mothers are increasingly less accessible to their children than nonemployed mothers. Indeed Lamb (1982) and Webb (1984) project that seventy percent of women between ages 25 and 54 will be in the labor force in 1990, many of them with children under six years of age. One might predict role alteration in light

of the increasing presence of mothers in the work force. But in spite of this trend, there is no clear evidence that fathers are expanding their parental responsibilities. Although Gold and Andres (1978a, 1978b) indicate that parents in families with working mothers describe themselves as having a more equal sharing in domestic responsibilities, Stuckey, McGhee and Bell (1982) report no more caretarking by husbands whose wives worked.

Whether or not husbands are becoming more helpful to their working wives, it is clear that children of employed mothers experience less time with mother. Frequently they must also endure the results of serious role strain as mother balances home and work responsibilities. How this affects the development of infants and preschoolers has been the focus of a sizable body of research. As one might guess, the relevant research literature has yielded conflicting results. White (1981) firmly states that the research indicates "children will get off to a better start in life when they spend the majority of their waking hours being cared for by their parents and other family members rather than any form of substitute care" (p. 11). This position is opposed by reviewers of the literature. For example, O'Connell (1983), claims the research has shown "no consistent adverse effect of out-of-home child day care" (p. 68). Several other researchers and reviewers (Etaugh, 1974; Hock, 1978; 1980; Hoffman, 1974; 1979) have concluded that maternal

employment per se may not produce adverse effects but that in combination with other variables it may. They add that maternal employment is not the same as maternal deprivation and there seem to be variables that can mitigate any potential negative effects of maternal employment on the children.

Numerous reviewers have considered the specific effects of maternal employment and subsequent nonmaternal care upon children (Etaugh, 1974; 1980; Hoffman, 1974; 1979; O'Connell, 1983; Rutter, 1981; Smith, 1981; White, 1981). However, with the exception of Rutter (1981) and White (1981) these reviewers explored the research as it related to all ages of children. Only Rutter (1981) and White (1981) evaluated the research as it pertained primarily to preschool age children. In an effort to reevaluate the literature in reference to infants and preschoolers, this review will begin with theoretical concerns about maternal availability to younger children. Three aspects of the empirical effects of maternal employment will then be reviewed. These aspects include (a) the effects of maternal employment on parenting, (b) the effects on attachment, and (c) the effects on socioemotional and cognitive development. This will be followed by a discussion of general limitations of such research and a conclusion section proposing guidelines for future research.

Theoretical Issues

Before examing the research data it seems useful to consider the theoretical issues that have caused social scientists to take such a concerned look at the factors involved in healty child development. Developmental theorists have concerned themselves with two relevant concepts in this area--attachment and maternal deprivation--and their effects upon a child's emotional and cognitive development. John Bowlby (1969, 1973) has consistently stressed that separation from mother may cause distruptions in the attachment process. It should therefore be considered dangerous to the child's mental health and be avoided whenever possible. Bowlby further stated that there appears to be a critical time frame for attachment to take place, hence, the special need for early mothering. Additionally, he contends that this attachment to mother is by and large different in quality from all other subsequent attachments and is the forerunner which creates all future patterns of attachment. In that sense, the quality of attachment to mother affects all future relationships.

Bowlby's concerns were originally formulated as he became convinced that the attachment process was critically involved in later development of psychopathology. He believed in particular that sociopathic personalities and other characterological pathology arose primarily from a disturbed attachment process.

Ainsworth (1973) has also suggested there is a critical phase for attachment and that the quantity and quality of mother-infant interaction determines whether the infant becomes securely attached. The mother's sensitivity and responsiveness to the infant's signals and communication particularly influence the quality of attachment. Ainsworth warns that adverse effects on mental health of children may result in two ways. First, a failure of the infant to even form an attachment to mother can lead to developmental problems. Secondly, if children are separated from their mother once old enough to form the attachment but before they are mature enough to sustain this attachment, it may also result in adverse developmental problems. Thus she states, "It would seem wise for parents - if they had a choice - to move cautiously rather than plunge into substitute care arrangements with a blithe assumption that all is bound to go well" (Ainsworth, 1979, p. 935).

Recently Selma Fraiberg (1977) has echoed this same concern in her book, Every Child's Birthright: In Defense of Mothering. She argues that children who are cared for by numerous caretakers may fail to form the attachment bonds necessary for healthy emotional and cognitive development. These authors, each coming from a different theoretical perspective, have built their case for the importance of the mother's availability upon the following beliefs: (a) the importance of early attachment with

mother, (b) the importance of a consistent caretaker, and (c) the critical nature of the early years of life for healthy psychological development.

Theorists who consider the early years crucial for healthy development would also predict that certain behaviors would become increasingly more evident as a person enters adulthood. They would likely suggest that failure to adequately acquire attachment to mother or having experienced a disruptive attachment as a young child could lead to many kinds of difficulties in later interpersonal relationships. Such liabilities as an inability to form intimate relationships with others, engaging in destructive relationships, experiencing repeated labile relationships, or being rather emotionless and withdrawn in relationships are potential results for the adult who experienced attachment difficulties. Further, psychoanalytic theorists have suggested that depression can be linked to lack of maternal availability during the crucial early years. While this list does not exhaust the possibilities of maladaptive adjustment connected with dysfunctions in the attachment process it does serve to illustrate the potential "sleeper" effects which need to be addressed by future research.

Despite the alarming nature of these theorists' conclusions, other social scientists are much less concerned (e.g., Chess & Thomas, 1981; Rutter 1974, 1979a, 1979b). Michael Rutter proposes that effects of so-called

maternal deprivation are unrelated to separation of the child from the mothering person but result instead from the significant discord and disharmony within the family. It is not the separation per se but the disrupted family life that produces the ill effects. This has recently received indirect support from Goldberg and Easterbrooks (1984) who found that good marital quality was associated with optimal toddler functioning. Though it was not specified whether these toddlers had working mothers, nonetheless the association of good toddler functioning with good marital quality lends support to Rutter's argument. In addition, Rutter argues that the child's main bond with the mother does not differ in kind and quality from all other bonds, disputing Bowlby's claim. "The most parsimonious explanation of the research findings suggests that a child needs to have the presense of a person to whom he is attached but it is irrelevant whether or not this person is his mother" (Rutter, 1974, p. 49). While acknowledging the importance of the attachment process, Rutter believes it is misleading to link it with maternal care.

Chess and Thomas (1981) propound an even more divergent viewpoint. They contend that the so-called importance of the mother-infant relationship in the neonatal period and the first year of life is <u>not</u> supported by the research literature. More specifically, they believe that the mother-child relationship in the

first few years of life is one of many unreliable predictors of later behavior. In an attempt to reevaluate the conclusions of these theorists the remainder of this paper will consider the relevant research results in the last 15 years.

Effects on Parenting

Researchers have only begun to study the effects of maternal employment upon the parenting style of the mother and father. Previous research, focusing upon the effects of maternal employment and subsequent nonmaternal care, evaluated the impact on the children but, seldom assessed its effects upon parenting in general. More recent research efforts have included information on parental styles and attitudes. These data yield information regarding parental beliefs about the needs of the infant, how such beliefs may impact decisions about the need and/or desire for mother to work, and subsequent effects upon parenting attitudes and behavior.

Studies have shown career orientation to be a rather stable attitude which was also found to relate to parental beliefs about infants' needs (Hock, 1978, 1980). Hock found that both working and nonworking mothers were predisposed toward distinct beliefs from each other (i.e., working mothers had different beliefs at the birth of their child than non-working mothers). That is, mothers who were career oriented at the birth of their child did eventually work and felt that there was no strong need for

exclusive maternal care of their infants. On the other hand, mothers who were not career oriented at the birth of their child not only did not seek later employment, but also felt that exclusive maternal care was very important for the development of their child. Additionally, infant distress was perceived differently by these two groups of mothers. Nonworking mothers saw infant distress as a reaction related to their leaving. Working mothers were less likely to make such an attribution and were more confident about the competence of the substitute caregivers. Working mothers also expressed less feelings of anxiety about leaving their infants with the caregiver. Thus the nonworking mothers seemed to take the attitude that they should be the primary caretaker, whereas the working mothers seemed to feel more confident about sharing this role with others.

Several studies have considered whether the mother's positive or negative attitudes towards her employment status affects her childrearing behavior. More positive interaction with children has been previously found for mothers who were satisfied with their employment status (Hoffman, 1963). Hoffman indicated that the working mother who enjoyed her work showed her child more affection and used milder forms of discipline than mothers who did not enjoy their work status. Many recent studies have found that an incongruence toward work status can be more detrimental to parenting attitude and behavior than

work per se (Etaugh, 1974; Hock, 1978, 1980; Hoffman, 1974; O'Connell, 1983; Stuckey, Mc Ghee & Bell, 1982). Stuckey et al. (1982), for example, found that parents who had beliefs about maternal employment that did not match the employed or unemployed role of the mother exhibited more negative affective behavior and attitudes toward their children than parents who had attitudes that matched the employment role of the mother. Thus a mother who worked and felt positive about this had less negative behavior and attitudes toward her child than a mother who worked and felt she should be at home caring for the child. The same was true for unemployed mothers regarding their attitude toward their children. That is, unemployed mothers who desired this role were more positive toward their children than unemployed mothers who wished to work. While Stuckey et al. found little difference in caretaking responsibility between families with employed mothers and families where mothers did not work, they did find that parents from single earner families demonstrated more speaking and quiet play with their children than parents from dual-earner families.

Other studies have investigated maternal role satisfaction (Gold & Andres, 1978b, 1978c). Although they did not report whether these mothers were satisfied with their employment status, Gold and Andres did report that working mothers were significantly more satisfied with their parenting roles than nonworking mothers. They also

found that the husbands of working wives were more satisfied with their wives' roles. Further they indicated that most of the nonworking mothers would eventually seek employment when their children were older. Hence, the mothers who were unemployed at the time of the study may have been less satisfied because they had ambivalent feelings about the needs of their children and the desire to work, which left them less content with their present situation.

Another factor that may affect the behaviors and attitudes of employed mothers is the health of their infants. In a study of preterm infants, Cohen (1978) found that nonworking mothers showed more positive attention to their infants than did working mothers. However, subsequent analyses on maternal attention towards infants conducted only on the intact families (i.e., intact families with either employed or unemployed mothers) dropped this as a significant discriminator. There was still a strong trend ($p < .07$), however, toward nonworking mothers showing more positive attention. Hence whether or not a family is intact appears to be an important factor to consider and control for in future research endeavors.

In sum, there is some evidence that working mothers are different from nonworking mothers in their parental attitudes (Hock, 1978, 1980) and behaviors (Cohen, 1978). However, a more frequent conclusion (Etaugh, 1974;

Hoffman, 1974; O Connell, 1983, Stuckey et al., 1982) is that the congruence between the mother's work status and her preferences about it (as well as her family's preferences) may be a more important factor than her work status alone. When the attitudes toward work status are incorporated in a research study, the differences between working and nonworking mothers often decreases. Most studies and reviews have clearly indicated that an incongruent attitude with work status produces the least positive parental attitudes and behaviors (Etaugh, 1974; Farel, 1980; Hock 1978, 1980; Hoffman, 1974; O'Connell, 1983; Stuckey et al., 1982).

Effects on Attachment

Interest in attachment has been influenced by several theorists (e.g., Bowlby and Ainsworth) who have warned against regular separations of infants and young children from their mother. They have predicted potentially dire consequences for those who experience these separations. In attempting to study this empirically, many researchers have investigated effects of nonmaternal care and maternal employment on the attachment process. In particular they have investigated whether children reared in day care manifest qualitatively different kinds of attachment than children reared at home. The assessment tool most often used is the Strange Situation Behavior Instrument developed by Ainsworth & Wittig (1969). This instrument uses a controlled observation technique consisting of

eight "everyday" episodes. The infant/toddler is exposed in a standard order to a novel environment, a female stranger, the departure of the mother and the stranger, and subsequent returns of the mother and the stranger. A detailed narrative is kept and a quantifiable description of the infant's interaction with the mother and the stranger is obtained. The results yield information about the level of security of attachment these children feel towards their mother. Related characteristics such as crying, smiling, giving and touching have also been observed by research scientists (e.g., Caldwell et al., 1970).

The wide use of the Strange Situation Behavior Instrument has facilitated comparisons among a large number of studies. Even so, it is certainly not without its critics. Bronfenbrenner (1977) for example, has stated that the Strange Situation has become the study of the strange behavior of children in a strange situation for a limited time with strange adults. Chess and Thomas (1981) cautioned against "transposing findings from artificial experimental settings to real life situations" (p. 219). Others, in a review of the literature, suggested that "it is not clear that the behavior of children older than 18 months in the strange situation is related to the quality of their attachment relationship with their mothers" (Vaughn, Gove, & Egeland, 1980, pp. 1204-1205). Modifications of the procedure by the

same researchers also contribute to some confusion in comparing data. Brookhart and Hock (1976) observed the responses of infants to brief separations both in the laboratory and at home. They discovered a difference in avoidant responses in the home and those in the laboratory. While this demonstrates a need for attempts at further validation and study of this instrument and/or development of new measurement instruments, the widespread use of Ainsworth's instrument nonetheless has proved useful in studying the phenomenon of attachment.

The effects of attachment will be addressed in two ways in this section. First, empirical data that can be used to evaluate the importance of attachment will be presented briefly. Secondly, research will be evaluated concerning the effects of maternal employment and nonmaternal care upon the attachment behaviors of infants and preschoolers.

Attachment and Later Development

Studies conducted by Sroufe and associates have investigated the predictive value of attachment status on later development. These studies did not attempt to differentiate between home-reared and day care children but simply examined whether attachment status was related to subsequent developmental competence. Sroufe found that differences in patterns of behavior as measured by the Strange Situation Behavior Instrument are predictive of later development. Matas, Arend and Sroufe (1978) found

that infants assessed as securely attached at 18 months of age were found to be more enthusiastic, persistent, cooperative and in general more effective at 2 years of age than infants also observed at 2 who were assessed as insecurely attached at 18 months. Differences in patterns of behavior were also found during preschool years (Waters, Wippman, & Sroufe, 1979) and at age 5 (Arend, Gove, & Sroufe, 1979). The differences in effectiveness were measured by peer competence and ego strength during preschool years and competence and ego resiliency at age 5. Chess and Thomas (1981) have suggested that these phenomena may be better explained by consistency in temperament than by attachment quality. While further research is required to clarify this, the research does indicate that, whatever the Strange Situation measures, it is predictive of later development and is therefore a useful tool to examine the effects of caretaking experience.

Attachment and Maternal Employment

There is a large body of research indicating that maternal attachment is not disturbed by non-maternal care (Caldwell, Wright, Honig & Tannenbaum, 1970; Doyle, 1975; Farran & Ramey, 1977; Moskowitz, Schwarz & Corsini, 1977; Portnoy & Simmons, 1978; Ragozin, 1980; Roopnarine & Lamb, 1978). These researchers studied infants ranging in age from five months to four years, typically comparing home-reared toddlers with those who were attending high quality

day care centers regularly. All but Caldwell et al. and Farran and Ramey have employed the Strange Situation Behavior Instrument as one of their measures of attachment.

Three of the studies (Moskowitz et al, 1977; Portnoy & Simmons, 1978; Roopnarine & Lamb, 1978) observed the attachment of children who entered day care around three years of age. Consistent with object relations theory (Mahler, Pine & Bergman 1975), it is not surprising that these children exhibited normal attachment. They had spent the important early years reared at home. However, other researchers (Caldwell et. al., 1970; Doyle, 1975; Farran & Ramey, 1977; Ragozin, 1980) have studied much younger children and have also concluded that normal attachment was not affected by the caretaking arrangements.

Unfortunately, some methodological difficulties confound these conclusions. Farran and Ramey (1977), for example, in studing the youngest age group, did not use Ainsworth's instrument and did not have a control group. They simply compared whether the toddlers preferred mother over the teachers, a finding which provides information about preference but not security of attachment. Caldwell et al. (1970) stated at the outset that theirs was an attempt to create an environment that would not hinder the attachment process or development of children in day care. They took care not to allow any infant less than

six months of age to participate, with most of the infants entering at one year of age. But they were not as careful to eliminate examiner bias which may have affected their objectivity. In addition they modified the Ainsworth instrument. In spite of this, these findings seem to substantiate one claim: that infant day care does not have to have the negative effects of institutionalization.

Others, e.g., Blehar (1974) and Vaughn et al. (1980), provide data to the contrary. Blehar compared twenty 2- and 3-year-old children who had been in day care with an equal number of home reared children. The children attending day care had done so for an average of four months with ten children entering at just twenty-four months of age and ten entering at just under thirty-six months of age. She found the two-year-olds to exhibit significantly more avoidant behavior at their reunion with mothers and the three year olds to exhibit significantly more anxious, ambivalent behavior than the home-reared children. Vaughn et al. (1980) studied three groups of low socioeconomic infants, assessing their attachment by the Ainsworth method at twelve and eighteen months of age. They found a trend in the early-to-work group (mother returned to work before the infant was twelve months old) toward a disproportionate number of infants with anxious-avoidant attachment. While these results are in conflict with previously cited studies, several hypotheses will be offered as possible explanations.

Moskowitz, Schwarz and Corsini (1977) attempted to replicate Blehar (1974) and produced data which does not "support the idea that day-care experience impairs attachment to the mother" (p. 1271). One of their criticisms of Blehar's work suggested that she failed to control for experimenter bias (p. 1272). Another possible explanation for Blehar's results was suggested by Blanchard and Main (1979). Using a high quality day care setting, they found that the longer the length of subsitute care, the less likely it was that children would exhibit avoidance behavior at reunion. They believe that these results help explain Blehar's contrary findings since Blehar observed toddlers who had only four months of day care experience. The group of toddlers Blanchard and Main studied had had twelve months of day care experience which may have been a more appropriate length of time to allow for the toddlers to adjust.

In critically evaluating Vaughn et al., one discovers that their other major finding may serve to explain Blehar's results as well. They discovered that family intactness was significantly related to attachment status by the time the toddler was eighteen months old. Hence, the disproportionate number of insecurely attached toddlers may be more a result of marital disruption than substitute caretaking arrangements.

The stability of maternal attachment has also been investigated with similarly conflicting results.

Thompson, Lamb and Estes (1982) found that infants who entered nonmaternal care (day care or other substitute care) were more likely to change their attachment status than children who experienced no change in their caretaking arrangements. Using Ainsworth's instrument, their results indicated that the change was bidirectional. That is, there was just as much chance that the attachment status would change from secure to insecure as from insecure to secure. They concluded that attachment status, as measured by the Strange Situation, may be less stable than previously thought and may be only an accurate index of the current status of the mother-infant relationship. Thus they conclude that the attachment quality "is likely to change in response to changing family and caregiving circumstances" (p. 148).

Findings from two other studies generated contradictory data to Thompson et al. (1982). Investigating a stable middle class sample similar to the one used by Thompson et al. (1982), Waters (1978) reported that individual differences in patterns of attachment were highly stable between 12 and 18 months of age. Vaughn, Egeland, Sroufe, and Waters (1979) studied economically disadvantaged mothers and infants and found that the patterns of attachment were more labile than for middle class samples, but they too were generally stable. Whereas Waters (1978) reported that 96% of the infants under stable conditions retained their attachment

status from 12 to 18 months, Vaughn et al. (1979) reported that only 62% of children from economically disadvantaged families maintained their attachment status. Although 62% may still be a majority, it is low enough to raise questions about the stability of attachment during changing caretaking arrangements at least for disadvantaged populations. The possible change in attachment status may not always be negative but caretaking changes seem to force a renegotiation of the mother-infant relationship.

In general, the literature seems to counter the previous predictions of doom for children who attend day care centers, although the research is often contradictory. Three studies (Blehar, 1974; Thompson, Lamb & Estes, 1982; Vaughn et al., 1980) provide evidence that nonmaternal care very likely will affect the attachment status of children. This change has usually been shown to be negative but Thompson et al. (1982) had results that also demonstrated positive changes. Two other studies (Vaughn, Egeland, Sroufe, & Waters, 1979; Waters 1978), argue for a different conclusion. They found attachment status to be relatively stable. Nevertheless only Blehar (1974) provides evidence of the kind anticipated by theorists such as Ainsworth, i.e., a significant disturbance in the attchment status for children who experience regular separations from mother. Though there are issues to consider when interpreting the

results of Blehar, such as a failure at replication (Moskowitz et. al. 1977), she still provides data which warrants further consideration investigating the attachment process. This is especially important to elucidate the relationship between the child's prior experiences and his reaction to nonmaternal care.

In their review, Belsky and Steinberg (1978) conclude that nonmaternal care need not be accompained by disruption or distortion of mother-child attachment. This seems to be in agreement with the majority of the studies reviewed here (Caldwell, Wright, Honig & Tannenbaum, 1970; Doyle, 1975; Farran and Ramey, 1977; Moskowitz, Schwarz, & Corsini, 1977; Portnoy & Simmons, 1978; Ragozin, 1980; Roopnarine & Lamb, 1978).

While attachment is not apparently unequivocally damaged by maternal employment, day care or other nonmaternal care, the studies reviewed do suggest there are many other factors to consider and control for in future research endeavors: intactness of family and its contribution to attachment status; age of entry into day care or nonmaternal care; personality of mothers (Farran & Ramey 1977); quality of day care; economic status of families; assessment instruments; experimenter bias; and long term "sleeper" effects.

Effects on Social-Emotional and Cognitive Development

In response to Fraiberg, Bowlby and others, researchers have also investigated the effects of maternal

employment upon children's social-emotional growth and their cognitive development. This section will review the relevant research beginning with social-emotional development, followed by a review of cognitive development.

Social-Emotional Development

Studies of the effects of maternal employment and nonmaternal care on social-emotional characteristics of children have generally found day-care children to be more peer-oriented, whereas home-reared children are typically more adult-oriented. This has been supported by studies of two-year-olds (Macrae & Jackson, 1976; Schachter, 1981). These researchers found day-care children to be more peer-oriented, to relate better with peers, and to be more self-sufficient than their home-reared age mates. In their study of four- and five-year-olds, Gold and Andres (1978) reported that teachers rated the children of working mothers as better adjusted in their peer interactions. One study evaluating three- and four-year-olds who had been in day care since infancy (entering day care at approximately 9 months of age) found no differences in peer orientation when compared with children who had no prior day care experience (Schwarz, Strickland, & Krolick, 1974). Although they did find that the day-care children were more verbally and physically aggressive with their peers than were their home-reared age mates, this did not apparently differentiate the two

groups in their ability to get along with their peers. Thus at best, day-care seems to enhance preschoolers' peer orientation and at worst makes little significant difference as compared to children experiencing soley maternal care.

Home-reared children are more likely to use their parents and other adults for social-emotional support. Schachter (1981) found that home-reared 2-year-olds were more likely to speak to adults (found for girls only) and to solicit help and attention from them than were day-care subjects. They were also more likely to be jealous about sharing their mother's attention. In a study of 21-month-old children, Cohen (1978) reported that children of fulltime homemakers talked with their mothers more and reciprocated social interactions with them more frequently. Teachers of 3- and 4-year-olds rated children of homemakers to be more cooperative and less aggressive with adults than were children of working mothers (Schwarz, Strickland, & Krolick, 1974). Observing children 12 to 18 months of age, Cummings (1980) used a stressful laboratory situation, which home-reared children were more likely to complete without becoming extremely distressed. It would be interesting to see which children would cope with such stress more effectively when only peers were available for support. Although Macrae and Jackson (1976) found no differences in adult-orientation, the bulk of the studies to date have indicated that home-

reared children are more adult oriented in whom they talk to, whom they cling to, and whom they draw support from in coping with stress.

Two other studies that explored the effects of maternal employment on general social-emotional characteristics came from Schwarz et al. (1974) and Schwarz, Krolick and Strickland (1973). Both studies evaluated 3- and 4-year-old children who had been in day care for an average of three years with a home-reared group. In addition to what has previously been reported (i.e., day-care-reared children were less cooperative with adults and were more physically and verbally agressive with adults and peers), the 1974 study found that day care chidren had a tendency to run about more than home reared children. The significance of this study rests with the second evaluation conducted on the children. This was completed after eight months during which time both groups of children attended the same day care and hence had very similar experiences. In spite of this common experience, the differences between the groups remained which suggest "that the effects of early care arrangements may be relatively stable and that specific effects vary with the age of the child" (p. 506). Schwarz et al. (1973) found that children who had been in day care showed more positive affect upon arrival and showed a trend toward less tension (i.e., they were more relaxed as indicated by bodily movements such as hand wringing and nonfluid

movement) and showed greater social interaction than home-reared children. In this case, these results might be expected since the home-reared children were observed on only their first day and fifth week of day care giving them very little time to adjust.

Cognitive Development

The effects of substitute care on cognitive development have been studied by researchers with mixed results. Several studies have indicated that day care enhances cognitive development. Studying two-year-olds, Macrae and Jackson (1976) found that day care children were better at problem solving, ability to abstract, and planfulness than were home-reared children. In Schachter's (1981) study of toddlers, she found that those with employed mothers scored higher on the Stanford Binet than those with nonworking mothers. Using a different instrument (The Cattell Infant Scale), Doyle (1975) found the same results with 18-month-old infants. In a two-year longitudinal study, Robinson and Robinson (1971) evaluated cognitive development in both disadvantaged and middle-class infants. They found that, having experienced high quality comprehensive group care, culturally deprived infants not only exhibited enhanced cognitive development, but sustained it while the control group decreased in cognitive development. However, these group differences could have been due to differential examiner familiarity (day care children had previous interactions with the

examiner) or practice effects (day care children had been tested before).

In contrast to these results other studies have reported negative effects of day-care enrollment on cognitive development. Gold and Andres (1978c) found that 4- and 5-year-old boys scored lower on the Wechsler Preschool and Primary Scale of Intelligence when their mothers were employed. In a study of higher risk preterm infants, Cohen (1978) found these infants scored higher on the Bayley Scale at 18 and 25 months of age when they were cared for at home by their mothers.

In contrast to both the previous positive and negative results, Hock (1980) found no difference in mental development between groups of infants observed at 3, 8 and 12 months. One of her groups experienced home care with mother and the other experienced private family care. Rubenstein, Pedersen, and Yarrow (1977) also found no differences in 16 of 17 measures of infants' functioning between those who experienced maternal care and those who experienced substitute care.

Given these conflicting results it is difficult to definitively summarize these findings. The studies covered a range of preschool ages (3 months to 5 years of age), day care quality (family day care to enriched university day care) and substitute caregiver quality (not usually described). As disscussed in the earlier section on effects on parenting, maternal attitude toward work

status may influence the effects of maternal employment on preschool children. Farel (1980) studied five-year-olds and found that unemployed mothers who preferred this role had children who were rated higher on school competence and adjustment than children of mothers who did not work but desired to work. Congruence or lack thereof did not differentiate between the children whose mothers worked in this study.

In summary, about the only consistently demonstrated positive effect of day care is on preschoolers' peer orientation. While home-reared children are more likely to make use of parents, they are also more jealous of their mother's attention. Day care children, due to their length of stay in day care, are more positive at arrival and seem less stressful about being there. But day care children have also been found to be more physically and verbally aggressive with peers and adults. In addition there is evidence to suggest that the specific effects of early care arrangements may vary with the age of the child and these effects may be relatively stable even in the event of a change in caretaking arrangements.

Research on cognitive development is not particularly clear. The majority of the studies cited either show enhanced development with day care (especially for disadvantaged groups) or no difference at all. A few studies showed home-reared children having greater cognitive development. This suggests that there may be

groups that do better in day care (e.g., disadvantaged populations) and others who fare better at home (e.g., high-risk preterm infants).

Research Limitations

Before drawing definitive conclusions, some general, important limitations of research on humans in general and on parenting in particular must be acknowledged. Hoffman and Nye (1974) have enumerated a number of these. Generally speaking, the major difficulty arises from the nature of the question being asked. It is similar to the difficulties facing researchers trying to quantify concepts relating to the process and outcome of psychotherapy. In both instances the nature of the questions involve examining complex internal processes that often defy clear behavorial observations and descriptions. For example, how does one measure such concepts as attachment, separation anxiety, and concepts related to interpersonal relationships and be confident that these measures truly tap the variable in question? Futher, unlike research on animals, research with humans does not often allow for random assignment of subjects to an experimental group and a control group. And this is certainly true for whether mothers choose to work or not. Therefore, the majority of the body of research rests upon ex post facto analysis, which Campbell and Stanley (1963) have suggested does not allow for definitive causal conclusions. Hence, the groups are

self-selected, which raises the question as to whether the differences between groups are due to the employment differences or extraneous variables (e.g., achievement motivation, husband's income, husband's caretaking role, etc.). Some researchers have attempted to control for this by matching groups on a number of variables, but they still cannot eliminate all the potential problems in making causal conclusions.

The issue of causality directly affects recommendations for decision-making, whether by individuals or by government agencies. Correlational evidence alone (e.g., no relation between maternal employment and child problems) is an inadequate basis for decision-making (e.g., deciding whether the choice between employment would or would not influence one's children). The Head Start program is an apt example of this point (Cook & Campbell, 1979). Although recipients of the program performed no better academically in later school years than nonrecipients, the program may have improved educational achievement of those who did participate. In both examples, a zero correlation does not necessarily imply no effect of the independent variable (e.g., employment status) on the dependent variable (e.g., child development).

While one must remind readers that nonexperimental studies do not imply causal relationships, Gottman and Markman (1978) have proposed several reasons which attest

to the value of these type of studies. First, they suggest although these studies do not demonstrate causality, they do eliminate some plausible rival hypotheses with some degree of confidence. Second, "we often confuse explanation of a phenomenon with accounting for variance" (p. 37). Hence, although we may be able to control a dependent variable, we may do so without understanding the process of control. And thirdly, correlation and other nonexperimental designs often describe important sequences of events. An adequate sequential description is often useful for making causal inferences and understanding variance measured by the relationship between variables.

In order to optimize generalizability of results, moderately large, heterogeneous population samples are required. Unfortunately a large majority of studies employed small sample sizes, drawn primarily from middle-class populations, and compared groups using high quality day care centers with home-reared children. Further complicating comparisons among studies, the characteristics of the day care were often not reported. Falender and Mehrabrian (1979) have persuasively argued that, in order to compare studies, the characteristics of the caretaking setting and staff are important factors to match. It would be well to conduct more studies using a variety of population samples with infants and preschoolers cared for not only by high quality day care

centers but also all other forms of substitute care (e.g., community day care, family day care). This is particularly true for family day care, where approximately ninety percent of children under six-years-old receive care (Hoffman & Nye, 1974).

Belsky and Steinberg (1978) add that the research is restricted to immediate effects, with few studies following up on children's development beyond preschool years. They also stress the questionable ecological validity since much of the assessment of effects is conducted in artificial settings with artificial activities (e.g., Ainsworth's Strange Situation procedure). Finally, this research may not truly assess any in-depth or lasting effects of separation from mother. These difficulties will only be resolved with better assessment tools and quality longitudinal studies.

In sum, the research has been narrow in focus, and causal inferences about the effects of typical community day care programs cannot be made (Anderson, Nagle, Roberts & Smith, 1981). Despite limitations on our ability to generalize confidently to typical day care arrangements, these studies offer much information and relevance to decisions concerning maternal employment. These studies have raised our awareness about these issues and delineated many factors which contribute to our understanding of the complex phenomena of human development.

Conclusions

This review has attempted to assess the results of research evaluating the effects of maternal employment and nonmaternal care in three areas: effects upon parenting, effects on attachment, and effects on social-emotional and cognitive development. The most salient implication to date is that the predicted catastrophic consequences of maternal employment and nonmaternal care are not strongly supported by current data.

The general results of literature relevant to the effects of maternal employment on parenting suggest that work status per se is not as important a factor as the attitudes of the mother and her family towards her employed or unemployed status. There is some evidence (Cohen, 1978) to suggest that the health of the children involved may negatively impact the effects of maternal employment on parenting. However, the attitude of the mother and family toward her work status remained a important factor even in this case.

Research exploring the attachment process has also largely failed to support the predicted dire consequences. Although nonsignificant results do not necessarily imply that nothing harmful is occurring, they do seem to temper previous predictions. What remains clear is that high-quality day care centers seldom produce negative effects on attachment as measured by the Strange

Situation Behavior Instrument.

Finally, the results of the effects on social-emotional and cognitive development are also not generally cause for alarm. The results seem rather innocuous, with most studies finding day care children as having either more peer orientation or having no differences from home-reared children.

Research studying the effects of nonmaternal care on cognitive development has yielded generally positive results, especially for disadvantaged populations. One of the few contradictory findings comes from Cohen (1978), which suggests that high-risk populations (e.g., preterm infants) may develop more positively when reared primarily at home.

In light of current research there does seem less to fear about monmaternal care. However, considering the research limitations mentioned earlier in this paper, some conflicting results, and the long range predictions of theorists who support the importance of early maternal care, one should still proceed with caution. One could argue with equal validity that the current research has only shown the need for better research instruments and long term follow up studies. One of the most important limitations is the lack of longitudinal studies. The only one found by this writer was done by Moore (1975). In an attempt to investigate any "sleeper effects," Moore evaluated the subsequent development of children who had

either received exclusive maternal care for the first five years or had experienced a minimum of one year of 25 hours a week of nonmaternal care by age five. This was evaluated up through adolescence. He found that the proportion of items discriminating between these two groups was greater by age 15 than at younger ages. There were also sex differences detected. Moore found that the behavior of boys who experienced early exclusive mothering could be summed up as "sensitive fastidious conformity," which became more marked as they grew older. They were sensitive both physically and socially, and the conformity was to adult rather than peer group standards. In contrast, the behavior of the group of boys who experienced diffuse mothering was summed up as "fearless, aggressive noncomformity." This first became evident at seven years of age. This behavior involved outgoing behavior with peers on the one hand and numerous differences with adults on the other.

Fewer differences were found between groups of girls. At ages 6 to 8, the exclusively mothered girls typically chose quiet domestic play while the girls who received diffused mothering displayed more agressive and ambivalent feelings. These differences seemed more balanced, however, by adolescence.

Moore (1975) concluded generally that when "a mother keeps her child in her own care full time to the age of five (to the exclusion of nursery school as well as other

substitute care) the child tends early to internalize adult standards of behaviour, notably self-control and intellectual achievement, relative to other children of equivalent intelligence and social class" (p. 270). While Moore did not consider the effects of maternal employment, it is obvious that his research is relevant since maternal employment usually requires substitute child care.

There are numerous factors that are not yet fully explored and Moore (1975) has suggested many that will help illuminate the complex factors involved in the effects of maternal employment and nonmaternal care. Future researchers need to focus upon (a) the actual amount of contact and interaction between mother and child, (b) the nature and content of that interaction, (c) its emotional quality and enjoyment by both partners, (d) the amount, nature, and quality of interaction with peers, and (e) the amount of, nature and quality of activities other than social activities. Rutter (1974) also provides relevant factors to consider. Several important ones concern the child's ability to attach to other caretakers, the stability of the caretaking arrangements, and the effects of the presence of other siblings in minimizing the effects of separation experience.

Although this review did not discover the dire consequences of maternal employment and nonmaternal care predicted by some theorists, it can be argued that the

studies to date may be inadequate to assess these predictions adequately. Moore (1975) is a good example. His work is the only longitudenal research to date and his evidence suggests that the differences in mothering between groups was not usually evident until ages 6-8 and became more salient with increasing age. Thus, retrospective studies and longitudinal studies of high quality need to be conducted assessing relationship qualities in adulthood as a function of early maternal care. Such concepts as capacity for intimacy, frustration tolerance, and capacity to tolerate stress all need to be evaluated through personal interviews and experimental and naturalistic observations. Many extraneous variables would need to be controlled for and evaluated such as (a) the personality of the mother, (b) the quality of nonmaternal care, (c) motives for seeking or not seeking employment by mothers, (d) the father's caretaking role, (e) the presence or absence of siblings, (f) birth order and ages of siblings, (g) socioeconomic status of the family, (h) intactness of family, (i) experimenter bias, and (h) primary attachments to family members other than mother.

Assessment instruments need not only to incorporate observations within controlled experimental settings but also in less controlled naturalistic settings. Certainly attention to the validity of assessment procedure is also important. Additional useful assessment instruments that

can aid this sort of research are ones that can validly assess ego strength and relationship skills and capacities. Finally, a greater variety of population samples is required to increase generalizability. In sum, the present research is largely disarming but focuses primarily upon immediate results and hence does not evaluate long term effects. This being true for our empirical knowledge at present, one can only recommend careful attention to the unique needs and environment of each family considering this important decision.

References

Ainsworth, M. D. S. (1973). The development of mother-infant attachment. In B. Caldwell & H. Riciuti (Eds.), Review of child development research (pp. 1-94). Chicago: University of Chicago Press.

Ainsworth, M. D. S., & Wittig, B. A. (1969). Attachment and exploratory behavior of one-year olds in a strange situation. In B. M. Foss (Ed.), Determinents of infant-behavior (Vol. 4, pp. 111-136). London: Methuen.

Anderson, C. W., Nagle, R. J., Roberts, W. A., & Smith, J. W. (1981). Attachment to substitute caregivers as a function of center quality and caregiver involvement Child Development, 52, 53-61.

Arend, R., Gove, F., & Sroufe, L. A. (1979). Continuity of early adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. Child Development, 50, 950-959.

Belsky, J., & Steinberg, L. D. (1978). The effects of day care: A critical review. Child Development, 49, 929-949.

Blanchard, M., & Main, M. (1979). Avoidance of the attachment figure and social-emotional adjustment in day care infants. Developmental Psychology, 15 (4), 445-446.

Blehar, M. C. (1974). Anxious attachment and defensive reactions associated with day care. Child Development, 45, 683-692.

Bowlby, J. (1969). Attachment and loss: Attachment (Vol. 1). New York: Basic Books.

Bowlby, J. (1973). Attachment and loss: Separation, Anxiety and Anger, (Vol. 1). New York: Basic Books.

Bronfenbrenner, V. (1977). Toward an experimental ecology of human development. American Psychologist, 32, 513-531.

Brookhart, J., & Hock, E. (1976). The effects of experimental context and experiential background on infants' behavior toward their mothers and a stranger. Child Development, 47, 333-340.

Caldwell, B. M., Wright, C. M., Honig, A. S., & Tannenbaum, J. (1970). Infant day care and attachment. American Journal of Orthopsychiatry, 40 (3), 397-412.

Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Chicago: Rand McNally.

Chess, S., & Thomas, A. (1981). Infant bonding: Mystique and reality. American Journal of Orthopsychiatry, 52 (2), 213-222.

Cohen, S. E. (1978). Maternal employment and mother-child interaction. Merrill-Palmer Quarterly, 24 (3), 189-197.

Cornelius, S. W., & Denney, N. W. (1975). Dependency in day-care and home-care children. Developmental Psychology, 11 (5), 575-582.

Doyle, A. (1975). Infant development in day care. Developmental Psychology, 11 (5), 655-656.

Etaugh, C. (1974). Effects of maternal employment on children: A review of recent research. Merrill-Palmer Quarterly, 10 (2), 71-97.

Etaugh, C. (1980). Effects of nonmaternal care on children. Research evidence and popular views. American Psychologist, 35 (4), 309-319.

Falender, C. A., & Mehrabian, A. (1979). The effects of day care on young children: An environmental psychology approach. The Journal of Psychology, 101, 241-255.

Farel, A. M. (1980). Effects of preferred maternal roles, maternal employment, and sociodemographic status on school adjustment and competence. Child Development, 51, 1179-1186.

Farran, D. C., & Ramey, C. T. (1977). Infant day care and attachment behaviors toward mothers and teachers. Child Development, 48, 1112-1116.

Fraiberg, S. (1977). Every child's birthright: In defense of mothering. New York: Basic Books.

Gold, D., & Andres, D. (1978a). Developmental comparisons between adolescent children with employed and nonemployed mothers. Merrill-Palmer Quarterly, 24, 243-254.

Gold, D., & Andres, D. (1978b). Developmental comparisons between 10-year-old children with employed and nonemployed mothers. Child Development, 49, 75-84.

Gold, D., & Andres, D. (1978c). Relations between maternal employment and development of nursery school children. Canadian Journal of Behavioral Science, 10 (2), 71-97.

Goldberg, W. A., & Easterbrooks, M. A. (1984). Role of marital quality in toddler development. Developmental Psychology, 20 (3), 504-514.

Gottman, J. M., & Markman, H. J. (1978). Experimental designs in psychotherapy research. In S. L. Garfield & A. E. Bergin (Eds.), Handbood of psychotherapy and behavior change: An empirical analysis, (pp. 23-62). New York: John Wiley & Sons.

Hock, E. (1978). Working and nonworking mothers with infants: Perceptions of their careers, their infants' need, and satisfaction with mothering. Developmental Psychology, 14 (1), 37-43.

Hock, E. (1980). Working and nonworking mothers and their infants: A comparative study of maternal caregiving characteristics and infant social behavior. Merrill-Palmer Quarterly, 26 (2), 79-101.

Hoffman, L. W. (1963). Mother's enjoyment of work and effects on the child. In F. I. Nye & L. W. Hoffman (Eds.), The employed mother in America (pp. 95-105). Chicago: Rand McNally.

Hoffman, L. W. (1974). Effects of maternal employment on the child: A review of the research. Developmental Psychology, 10 (2), 204-228.

Hoffman, L. W. (1979). Maternal employment: 1979. American Psychologist, 34 (10), 859-865.

Hoffman, L. W., & Nye, F. I. (1974). Working mothers. San Francisco: Jossey-Bass Publishers.

Kirsch, J. (1981, August 9). One father's view: Shock and optimism at watching the young. The Florida Times-Union, pp. 1,4, section C.

Lamb, M. E. (Ed.). (1982). Nontraditional families: Parenting and child development. Hillsdale, N.J.: Lawrence Erlbaum Associates, Publishers.

Macrae, J. W., & Herbert-Jackson, E. (1976). Are behavioral effects of infant day care program specific? Developmental Psychology, 12 (3), 269-270.

Mahler, M. S., Pine, F., & Bergman, A. (1975). The psychological birth of the human infant. New York: Basic Books, Inc.

Matas, L., Arend, R., & Sroufe, L. A. (1978). Continuity in adaptation: Quality of attachment and later competence. Child Development, 49, 547-556.

Moore, T. W. (1975). Exclusive early mothering and its alternatives. Scandinavian Journal of Psychology, 16, 255-272.

Moskowitz, D. S., Schwarz, J. C., & Corsini, D. A. (1977). Intiating day care at three years of age: Effects on attachment. Child Development, 48, 1271-1276.

O'Connell, J. C. (1983). Research in review. Children of working mothers: What the research tells us. Young Children, 38 (2), 62-70.

Ragozin, A. S. (1980). Attachment behavior of day care children: Naturalistic and laboratory observations. Child Development, 51, 409-415.

Rubenstein, J. L., Pedersen, F. A., & Yarrow, L. J. (1977). What happens when mother is away: A comparison of mothers and substitute caregivers. Developmental Psychology, 13 (5), 529-530.

Rutter, M. (1974). The qualities of mothering: Maternal deprivation reassessed. New York: Aronson.

Rutter, M. (1979a). Maternal deprivation, 1972-1978: New findings, new concepts, new approaches. Child Development, 50, 283-305.

Rutter, M. (1979b). Separation experiences: A new look at an old topic. Behavioral Pediatrics, 95 (1), 147-154.

Rutter, M. (1981). Theory and review. Social-emotional consequences of day care for preschool children. American Journal of Orthopsychiatry, 51 (1), 4-28.

Schachter, F. F. (1981). Toddlers with employed mothers. Child Development, 52, 958-964.

Schwarz, J. C., Krolick, G., & Strickland, R. G. (1973). Effects of early day care experience on adjustment to a new enviornment. American Journal of Orthopsychiatry, 43 (3), 340-346.

Schwarz, J. C, Strickland, R. G., & Krolick, G. (1974). Infant day care: Behavioral effects at preschool age. Developmental Psychology, 10 (4), 502-506.

Smith, E. J. (1981). The working mothers: A critique of the research. Journal of Vocational Behavior, 19, 191-211.

Spock, B. (1977). Baby and child care. New York: Pocket Books.

Steinhart, P. (1979, May 20). Children: Victims in the culture of narcissism. Los Angeles Times, p. 1, part VI.

Stuckey, M. F., McGhee, P. E., & Bell, N. J. (1982). Parent-child interaction: The influence of maternal employment. Developmental Psychology, 18 (4), 635-644.

Thompson, R. A., Lamb, M. E., & Estes, D. (1982). Stability of infant-mother attachment and its relationship to changing life circumstances in an unselected middle-class sample. Child Development, 53, 144-148.

Vaughn, B. E., Egeland, B., Sroufe, L. A., & Waters, E. (1979). Individual differences in infant mother attachment at 12 and 18 months: Stability and change in families under stress. Child Development, 50, 971-975.

Vaughn, B. E., Gove, F. L. & Egeland, B. (1980). The relationship between out-of-home care and the quality of infant-mother attachment in an economically disadvantaged population. Child Development, 51, 1203-1214.

Waters, E. (1978). The reliability and stability of individual differences in infant-mother attachment. Child Development, 49, 483-494.

Waters, E., Wippman, J., & Sroufe, L. A. (1979). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. Child Development, 50, 821-829.

Webb, N. B. (1984). Preschool children with working parents. Lanham: University Press of America.

White, B. L. (1981). Viewpoint: Should you stay home with your baby? Young Children, 37 (1), 11-17.